

6 .1%

Boston

August 26, 2003

REPORT OF ANALYSIS

Sample Description:

Shore Tank CHS1

File #:

440664

Sample Marked:

Shore composite after discharge of Lab Reference #:

D4120

P41302378

Vessel/Ref:

Penn 120 Penn 120

Date Sampled:

8/26/2003

Location:

Sprague Portsmouth, NH

Date Tested:

8/26/2003

Client (s):

Sprague

Method	<u>Test</u>	Result
D 287	Gravity, API @ 60 F - Upper	11.0
D 287	Gravity, API @ 60 F - Middle	11.0
D 287	Gravity, API @ 60 F – Lower	11.0
D 287	Gravity, API @ 60 F - Composite	11.0
D 93	Flash Point, F	196
D 1796	Sediment and Water, Vol%	0.2
D 473	Sediment by Extraction, Wt. %	0.10
D 445	Viscosity @ 122 F, SFS	209.1
D 97	Pour Point, C / F	3 / 37
D 4294	Sulfur, Wt % - Upper	1.71
D 4294	Sulfur, Wt. % - Middle	1.72
D 4294	Sulfur, Wt % - Lower	1.73
D 4294	Sulfur, Wt % - Composite	1.71
D 482	Ash, Wt %	0.098
D 240	Gross BTU, LB/Gallon	18409 / 152242
D 3228	Nitrogen, Wt. %	0.34
IP 143	Asphaltenes, Wt %	5.0
D 95	Water by Distillation, Vol %	0.1
D 189	Conradson Carbon, Wt %	11.4
AAS	Trace Metals, PPM Wt Sodium	15
AAS	Trace Metals, PPM Wt Vanadium	62

John. F. Stachowiak

SGS North America, Inc.

Precision parameters apply in determination of above test results. Also refer to ASTM D-3244-88, IP 367 and Appendix E of IP "Standard Methods For Analysis And Testing" for utilization of test data to determine conformance with specifications. "Description of the tested sample material is as indicated by our customer. This report covers only those chemical components and physical properties for which tests were required. No other tests were preformed and no liability is assumed for anything not tested and reported."

SGS North America Inc.

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Approved, 7/16/02 S.Mitchell G:\Boston\Reports\C Of A - after Penn 120 at Sprague Portsmouth.doc THE ATTACHED CERTIFICATE REPRESENTS THE PRODUCT INSPECTED BY THE INSPECTION SERVICE ON THE DATE STATED ON THE CERTIFICATE IN THE TANK STATED BY THE INSPECTION SERVICE. SPRAGUE REPRESENTS THAT ANY PRODUCT IT MAY SELL AT THE RACK MAY DIFFER FROM SUCH INSPECTION CERTIFICATE BUT SUCH PRODUCT SHALL MEET THE SPECIFICATIONS AS MAY BE REQUIRED BY ANY APPLICABLE REGULATIONS WITHIN THE STATE THAT THE PRODUCT IS SOLD.